

April 7, 1960

Dr. John J. Bittner  
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Dear Dr. Bittner and Dr. Hirsch:

Thank you for your letter of March 21st. We had already discussed this problem among ourselves and I also reviewed your letter with Dr. Kornberg and Dr. Kaplan. We are all agreed, certainly, that the polyoma virus surely does represent a serious potential epidemiological threat. In fact, I wonder if there is any present evidence against a tumor-inducing capacity of this virus for man in its present state. Even if we were to conduct such atrocious experiments, it would take some time for the effects to come to light.

The whole matter is made even more precarious by the recent finding of the infectivity of the bare DNA extracted from the virus. Such DNA retains its infectivity in the presence of antibodies against the intact particles.

I would certainly encourage you to voice your concerns by publication in a journal of general distribution. What is less obvious is the practical effect of any measures that might be undertaken by a committee. It would be very difficult to regulate the activities of private research investigators even if it were considered advisable to attempt to do so. What I would hope for, for the time being, would be that the hazards be carefully spelled out and your conclusions made widely known. Do you think any committee could go beyond your own thinking in this direction?

You did mention my own activities in connection with interplanetary contamination; I would draw some second order distinctions. In the first place I think it quite likely that the event you are thinking of has already occurred from time to time in the past and may well be implicated in the present incidence of cancer. This is not to say that new hazards of great import might arise from time to time either in nature or in the laboratory. On the other hand, the interchange of planetary life forms would involve

quite unique ecological experiences, the consequences of which are almost impossible to predict. The very nature of space research makes necessary a concerted national effort in every segment of it and the recurrent involvement of committees in the details of individual experiments.

While I am certainly sympathetic to the aims of your letter, I do not feel that the genetic argument requires any more authoratative sponsorship than you would already give to it. In any case the existence of the hazard does not depend on the likelihood of new genetic events. I would therefore urge you to proceed with publishing your letter over your own signatures. Please let me know if I can make any further contribution to the development of this problem.

Yours sincerely,

Joshua Lederberg  
Professor of Genetics

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